30. (New) The tool of claim 29, further comprising a processor coupled to the acoustic transducer, wherein the processor calculates theoretical acoustic signal reverberations by combining a frequency domain response of the acoustic signal reflection with a theoretical frequency domain response of the metal plate, and wherein the processor relates the received acoustic signal reverberations with the theoretical acoustic signal reverberations to determine the one or more fluid properties.

Rule 1.126

31 ~~32~~. (New) The tool of claim 29, wherein the tool couples to a processor that measures a time delay between the generation of the acoustic signals and the receiving of the acoustic signals to determine an acoustic velocity.

32 ~~33~~. (New) The tool of claim 29, wherein the one or more fluid properties includes acoustic impedance.

33 ~~34~~. (New) The tool of claim 29, wherein the acoustic transducer is further configured to generate acoustic signals that impinge on the metal plate to cause said acoustic signal reflections and reverberations.

34 ~~35~~. (New) The tool of claim 29, wherein the one or more fluid properties includes fluid density.